



Castledown

 OPEN ACCESS

Technology in Language Teaching & Learning

ISSN 2652-1687

<https://www.castledown.com/journals/tltl/>

Technology in Language Teaching & Learning, 5(2), 1–11 (2023)

<https://doi.org/10.29140/tltl.v5n2.1157>

Online Etymology Dictionary: A Review of <https://www.etymonline.com/>



IBRAHIM HALIL TOPAL

Gazi University, Türkiye
ibrahimtopal@gazi.edu.tr

Abstract

The proliferation of computer- and mobile-assisted technologies has created manifold learning opportunities, one being online or electronic dictionaries (ODs or EDs) that foster and advance word searches and boost lexicographic guidance. One such linguistic resource is Harper's (2001) online etymology dictionary (OED) (<https://www.etymonline.com/>) that comes with web and mobile versions. In this context, this review intended to evaluate the aforementioned dictionary as per the adapted framework of Topal (2022). The OED's potential advantages were cited as etymological, cultural-historical, cross-linguistic awareness/understanding, lexical enhancement, and use as an academic resource. On the other hand, possible downsides were specified as linguistic complexity, lack of pronunciation histories, textual-visual distractions, linguistic/content-related inaccuracies, limited language interaction, and internet dependency. Recommendations for updates and upgrades were made concerning the web and mobile versions. Prospective studies of qualitative and quantitative nature were urged for corroboration of review findings.

Keywords: online dictionary, electronic dictionary, etymology, digital learning, educational technology

Introduction

Derived from the Latin “*dictionarium*” (collection of words and phrases) (Harper, 2001), a dictionary is a language reference tool in print and electronic form that provides its users with a vast amount of information (e.g., definitions, spellings, pronunciations, example sentences, synonyms, antonyms, parts of speech, phrases, idioms, verb conjugations, etc.) about the query item. On the one hand, the emergence and development of lexicography as a scientific field has produced dictionary compilations and academic examinations of dictionaries of any type (Jackson, 2017). On the other hand, the content

Copyright: © 2023 Ibrahim Halil Topal. This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Data Availability Statement: All relevant data are within this paper.

and variety of dictionaries has undoubtedly evolved with the emergence of the internet (Levy & Steel, 2015). Since the first printed dictionary in English (Johnson, 1775), the world has witnessed the emergence of monolingual (e.g., <https://www.oxfordlearnersdictionaries.com/>), bilingual (e.g., <https://www.spanishdict.com/>), multilingual (e.g., <https://lexicala.com/>), collegiate/learner's (e.g., <https://www.collinsdictionary.com/>), visual (e.g., <http://www.visualdictionaryonline.com/>), phonetic/pronunciation (e.g., <https://forvo.com/>), video pronunciation (e.g., <https://youglish.com/>), and collocation (e.g., <https://www.freecollocation.com/>) dictionaries, as well as thesauri (e.g., <https://www.powerthesaurus.org/>).

ODs, according to Levy's (2010) framework of integrating technology into language teaching, might be exploited at the application level in language education. Previous research cited manifold benefits to using dictionaries in classrooms. For instance, Summers (1988) concluded that using dictionaries provided learners with contextual cues and thematic establishment and thus facilitates lexical comprehension. Guillot and Kenning (1994) reported the potential use of monolingual electronic dictionaries as learning aids within the Robert Electronique Project. Winkler (2001) cited the advantages of learner's dictionaries as audiovisual materials and competitive/instructive nature. Examining the learners' perceptions of ODs, Jin and Deifell (2013) found that learners used different ODs for different purposes, especially in virtually-supported environments. In the same year, Huang and Eslami (2013) stated that learners primarily used dictionaries for word pronunciations and relatively for word frequencies. In their experimental study, Rahimi and Miri (2014) indicated that learners who used mobile dictionaries outperformed those who did not in a language test. Aslan (2016) demonstrated that mobile dictionaries were employed for vocabulary learning among translation majors. Comparing the effectiveness of electronic and paperback dictionaries (PDs), Rezaei and Davoudi (2016) revealed the outperformance of the first over the latter. In his experimental study comparing five groups, O'Neill (2019) showed that learners with previous training in dictionary use ranked second in their writing scores. Van der Merwe (2020) affirmed that ODs assisted in understanding the content knowledge through vocabulary learning. In a recent study, Trinh, Tran and Huynh (2021) indicated learner preference for ODs over PDs in vocabulary learning. More recently, Çolak and Balaman (2022) reported that an in-depth analysis of the screen-captured interactions revealed that ODs were an integral part of the social success of intercultural activities. Similarly, Dziemianko (2022) showed in her study that the illustrations in ODs helped learners with vocabulary retention.

Notwithstanding the educational gains, dictionaries, including ODs, might have some potential pedagogical pitfalls. Tuglar (2017), for example, reported that impracticality, labor-intensiveness, and technology restriction were the drawbacks of PDs, while the lack of elaboration, internet connectivity loss, and visual distraction were the downsides to ODs. Another potential drawback of ODs might be the lack of reliability and accuracy of data content (Tarp, 2012; Chotkarnchanawat, Liangpanit & Wasuntarasophit, 2017). Additionally, some ODs might yield inconsistent or disputable entries due to editorial oversight (Mohamad, Rashid & Mohamad, 2017). It goes without saying that using ODs requires stable internet connection as in nearly all online resources (Jian et al., 2009). Ferrett and Dollinger (2021) asserted that the primary impediment to the advancement of e-dictionary technology is the content is frequently altered unidentifiably and irregularly. Ultimately, learners studying with ODs might experience technical hiccups, such as website crashes and malfunctions. However, this is a risk available for any computerized tool (Andrei, 2017).

As far as etymology in language education is concerned, previous work cited several advantages. For instance, semantic elucidations and lexical associations of unfamiliar vocabulary might be conceivable through etymological data (e.g., prefixes, suffixes, and roots) (Akbulut, 2017). In addition to lexical comprehension, etymology also supplies learners with the necessary toolkit for making educated guesses in reading texts (Bellomo, 2005; Nation & Meara, 2013). Equipped with the essential

etymological knowledge, the confidence of learners in dealing with novel words also increases (Ebbbers, 2017). Engaging in etymology further provides learners with cultural information that might help them achieve cultural appreciation (Lund, 2007; Maxson, 2010).

Taking these into consideration, this review attempted to evaluate Harper's (2001) OED (<https://www.etymonline.com/>) using Topal's (2022) framework. In this respect, the OD at hand was generally described. The technological features were then explained. Potential pedagogical opportunities were next discussed. The review concluded with recognition of limitations and provision of recommendations. One study by Jassem (2017) critically reviewed this online dictionary (OD). However, the research scope was limited primarily to the Arabic origins of English. Accordingly, this review is expected to act as an academic guide to the literature on ODs, digital learning, and educational technology.

General Description

Founded in 2001 by Douglas R. Harper, a civil war historian and the editor of Lancaster newspaper (Institute of Multi-Sensory Education, 2015), Etymonline.com is a freely available OED offered as a website and a mobile application. The name derives from the combination of "etymology" and "online." Providing users with the history of around 50,000 words, this OD has mainly exploited the following sources, as cited on the website (<https://www.etymonline.com/>):

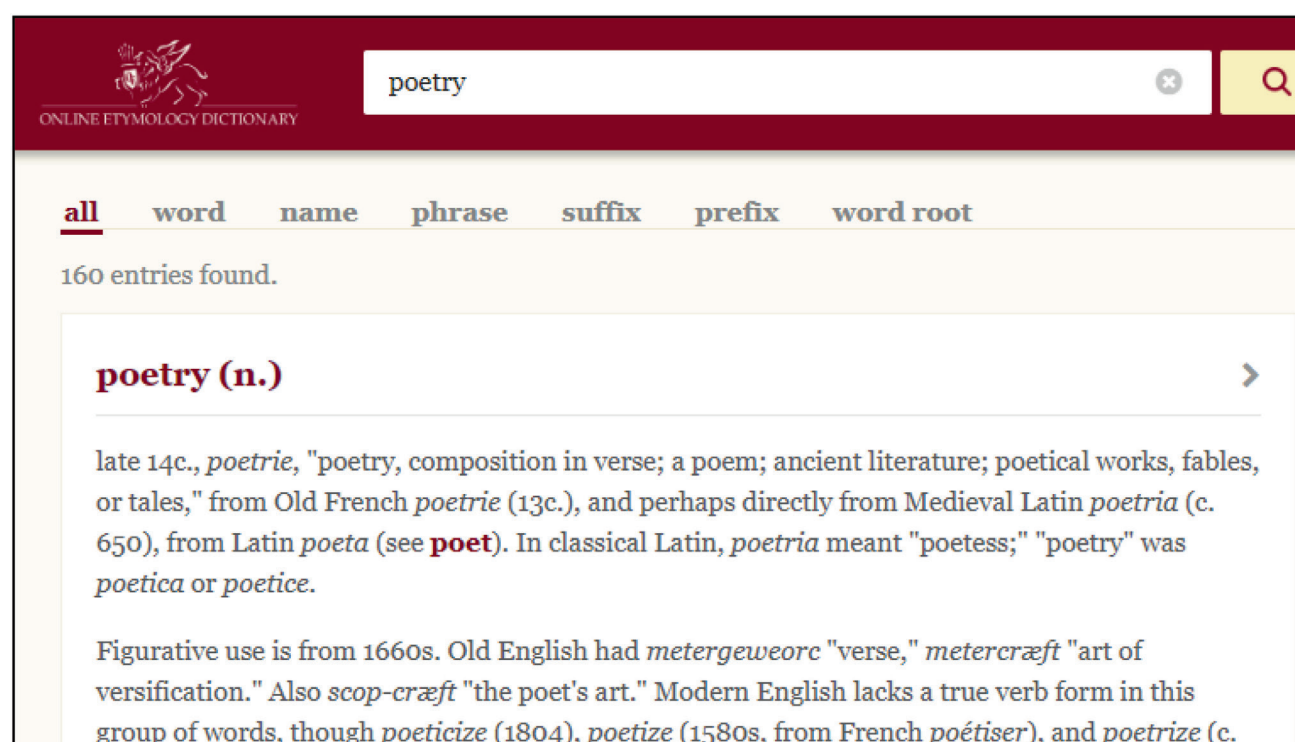
- *The Barnhart dictionary of etymology* (Barnhart & Steinmetz, 1988)
- *Etymologisches Wörterbuch der englischen Sprache* (Holthausen, 1927)
- *Dictionary of American slang* (Kipfer & Chapman, 2007)
- *A comprehensive etymological dictionary of the English language* (Klein, 1971)
- *Oxford English dictionary (2nd ed.)* (Dictionary, O. E., 1989)
- *An etymological dictionary of modern English* (Weekley, 1921)

Both the web and mobile version are user-friendly, with an easily navigable interface. The website welcomes users with a search box at the top, with alphabetized query option placed right under (Figure 1). This means that users can see the lists of words alphabetically if interested.

Users can also see the trending words right under the search box. Once a query is made about a word, the website presents various information (Figure 2), such as the word, names, phrases, suffixes, prefixes, and roots of the search word. The number of entries is also displayed right above the word. Users are then provided with etymological information, such as the historical evolution of the word and literal/figurative usage. The link to related entries and more displays entries linking to the searched word (i.e., poetry), such as poet and heraldry. Users are further given n-grams (Figure 3) of the words, a chart



Figure 1 The search box and alphabetized option on the website.



The screenshot shows the Online Etymology Dictionary interface. At the top, there is a search bar with the word 'poetry' entered. Below the search bar, there are tabs for 'all', 'word', 'name', 'phrase', 'suffix', 'prefix', and 'word root'. The 'all' tab is selected. Below the tabs, it says '160 entries found.' The main entry for 'poetry (n.)' is displayed. The entry text reads: 'late 14c., *poetrie*, "poetry, composition in verse; a poem; ancient literature; poetical works, fables, or tales," from Old French *poetrie* (13c.), and perhaps directly from Medieval Latin *poetria* (c. 650), from Latin *poeta* (see **poet**). In classical Latin, *poetria* meant "poetess;" "poetry" was *poetica* or *poetice*. Figurative use is from 1660s. Old English had *metergeweorc* "verse," *metercræft* "art of versification." Also *scop-cræft* "the poet's art." Modern English lacks a true verb form in this group of words, though *poeticize* (1804), *poetize* (1580s, from French *poétiser*), and *poetrize* (c. 1600).

Figure 2 A snapshot of a website interface following a query.

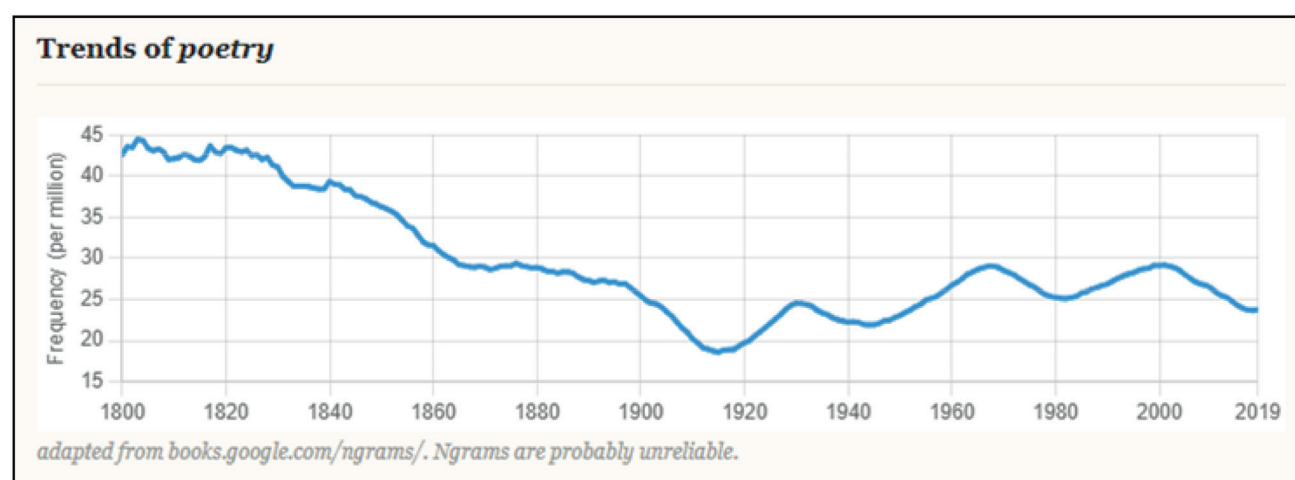


Figure 3 The usage trends of searched words in years by frequency.

that shows the trends of the word usage in years by frequency. However, users are cautioned against the reliability of the n-grams since they are adapted from books.google.com/ngrams/.

Following the snapshots of latest stories and a general information about the OED, the website presents four main tabs: links, products, about, and support (Figure 4).

Under the links tab, users can give feedback on specific and general issues or use the already available tags to leave feedback on. They can also access the primary sources and others exploited in the compilation of the OED. An interactive discussion box is available for users to make inquiries or join in discussions. They can further access the links to various sources about language, etymology, word friends, diversions, specific sources, or sources for writers.

LINKS	PRODUCTS	ABOUT	SUPPORT
Feedback	iOS App	Who Did This	Donate with PayPal
Full List of Sources	Android App	Introduction and Explanation	Ye Olde Swag Shoppe
Links	Chrome Extension	Follow on Facebook	Support on Patreon
© 2001-2023 Douglas Harper Terms of Service Privacy Policy			English (English) ⚙

Figure 4 *The main tabs available on the OED's website.*

The products tab basically directs users to the iOS store (rated 4.9/5.00) and Google Play (rated 4.8/5.00) for mobile versions of the OED, as well as the Chrome extension. The about tab, as the name suggests, provides the biography of the lexicographer, introduction to etymology, explanations of concepts and phrases used in the dictionary, and a link to follow the Facebook page. Ultimately, the support tab, self-explanatory as it is, provides links to PayPal, RedBubble, and Patreon to support the OED. Users might buy Etymonline products on RedBubble.

Different from the website, the mobile app allows users to add bookmarks, change text size, and copy links and share the content. It also enables them to access the etymological data on prefixes and suffixes ordered alphabetically.

Technological Features

The OED's web-based version is easily accessible at <https://www.etymonline.com/>, and the mobile applications can be downloaded from iOS App store or Google Play store. There is even a Chrome extension for those who might wish to look for the etymological origins of a word while reading online. The iOS version is compatible with iPhones (iOS 11.0 or later), iPad (iOS 11.0 or later), iPod touch (iOS 11.0 or later), and Mac (macOS 11.0 or later and a Mac with Apple M1 chip or later.) The iOS version also offers in-app purchases (Etymonline Premium 12 Months for \$17.99, Etymonline Premium 1 Month for \$4.99, and Etymonline Premium 6 Months for \$13.99). The Android version, on the other hand, requires Android-operating devices with 4.4 version or later. The in-app purchases on Android vary between \$1.26 and \$4.62. The navigation on the website and mobile app is easy, with relatively few tabs and non-distracting visuals. The OED can be used in 24 languages. Terms of service and privacy policy are also accessible on both versions. Those with questions about terms and privacy can contact the administrators through email (peigencihui@gmail.com). Another email address (etymonline@protonmail.com) is provided under the about tab for those with questions and comments. The website complies with the requirements of currency/timeliness (Metzger, 2007). That is, users are informed about the updates on the dictionary content as Ball and Bothma (2018) suggested. However, a few technical issues should be highlighted about the mobile app. First, the "contact the developer" tab does not function. Also, the premium version that guarantees ad removal malfunctions. Despite the upgrade to premium, ads still appear on the mobile version. The dark mode of the app in neither platforms is available, which might be displeasing to the eye, especially for visually-sensitive users.

Pedagogical Features

A critical evaluation of both versions revealed potential benefits under five categories: (i) etymological awareness/understanding, (ii) cultural-historical awareness/understanding, (iii) cross-linguistic awareness/understanding, (iv) lexical enhancement, and (v) academic resource. Etymonline offers

comprehensive data on word origins, enabling learners to comprehend word evolutions and associated meanings. It might, therefore, be an invaluable tool for linguistic exploration that can be captivating and instructive for language students and educators. Previous studies promoted the salience of etymological awareness/understanding, revealing that language learners and teachers might benefit from it while learning and teaching idioms (Boers, Eyckmans & Stengers, 2007; Bagheri & Fazel, 2010; Noroozi & Salehi, 2013) and acquiring information or guessing the meanings of slang words (Lillo, 2018). Vakhovska and Isaienko (2021), on the other hand, held that having a good understanding of etymology is essential for translation students to maintain word meanings. In addition, Hewett (2019) proposed four types of knowledge, among which is etymological awareness, to teach spelling to children. This awareness might assist children in identifying, for instance, the difference between “ch” and “sh” in spelling the French-originated word “chef.” Based on these studies, it might be argued that language learners should be equipped with etymological awareness, knowledge, and competence for better spelling and vocabulary learning and use, and the OED might be a valuable tool for achieving this goal.

Another advantage of the OED might be the promotion of cultural-historical awareness/understanding. The OED provides an in-depth exploration of the historical and cultural contexts in which words are created, thus enhancing the learner’s comprehension of linguistic and cultural elements. Given the intricate relationship between language and culture (Byram, 1994), it might be implausible to divorce language studies from cultural elements. In this sense, the OED might be a beneficial tool for increasing learners’ cultural-historical awareness/understanding. For example, the French-origin word “Renaissance” (meaning rebirth) is historically affiliated with the 14th-century Italian cultural and artistic movement. Another example is that the Japanese-origin word “sushi” might provide insights into the historical significance of rice in Japanese culture. A study by Stanciu (2020) demonstrated that etymology helped identify the impact of the hidden words of Turkish origins in the Romanian language on gaining insights into the Turkic languages and cultures. In another study, Sabonsolin (2022) maintained that etymology could help learners deepen their understanding of words and appreciate the impact of Cebuano/Filipino cultures on Spanish. Although the target languages are different, the same could be argued for the effect of other cultures (e.g., French, Scandinavian, and German) on English. The OED might be a valuable asset in that regard.

A relevant benefit that might be reaped from the OED is cross-cultural awareness/understanding. Etymology can offer insight into linguistic relationships between languages and thus foster language learning, especially for multilingual learners. A study conducted in the plurilingual Canadian context revealed that students were curious about etymology to discover, for instance, “Why is Urdu a mixture of languages?” and “Do other languages go like Urdu?” (Zaidi, 2020, p. 280). These learners’ questions might shed light on the potential benefit of etymology in raising their cross-cultural awareness/understanding. In this regard, the OED might be an essential digital tool to satisfy learner curiosity about cross-linguistic explorations. A practical in-class application of this might be using etymology to find out about students’ names to display interest in their ethnic background (Soe, Win & Tang, 2020). This might work well, especially in multilingual/multicultural classrooms and encourage active learner participation and foster inclusiveness (Rehman & Haider, 2013; Rodriguez-Keyes, Schneider, & Keenan, 2013).

A fourth profit of the OED is conceivable lexical enhancement. The available information about word origins, prefixes, suffixes, and roots on the OED might foster vocabulary expansion, especially for advanced learners and educators. Etymology, according to Pierson (1989), creates a meaningful learning environment wherein learners can generalize the meaning of the prefix “circum” (meaning around, on all sides) as in the word “circuit” and eventually “possess ownership of words” (Beck, 1984). Carter and McCarthy (2014) stated in their book that etymology is one of the instruments

retaining vocabulary. Several previous studies also indicated the effectiveness of etymology in retaining figurative language items (i.e., idioms) (Moreno, 2011; Baleghizadeh & Bagheri, 2012; Reisi Gahroei & Tabatabaei, 2013; Ali Zarei & Rahimi, 2014). The role of etymology in learning general vocabulary was also reported in earlier studies (Solgi & Sotoudehnama, 2017; Goltarnia & Rahmani, 2018). The easy and gratis accessibility of the OED might accordingly be at the disposal of language learners in improving their vocabulary knowledge.

The OED's final aid might be its use as an academic/instructional resource for enthusiastic language learners, teachers, academic researchers, linguistics/etymology majors because this digital tool supplies a wealth of etymological information on numerous words. A study by Moeljadi, Kamajaya and Darnis (2019) highlighted the significance of etymological studies for determining the loanwords in the Indonesian language. Simpson (2009) discussed the role of etymological elaboration in historical lexicography. Nesi (1999) reported that etymology was included in a course outline for language and linguistics students. Similarly, Aponte (2013) exploited *etymation* (etymology + animation) in her thesis to teach the history of spelling through animated cartoons. The OED might accordingly be leveraged for academic and instructional purposes.

Notwithstanding the potential benefits, the review outlined the potential pitfalls of the OED as follows: (i) linguistic complexity, (ii) absence of phonological information, (iii) limited interactivity, (iv) potential inaccuracies, (v) textual-visual distractions, and (vi) internet requirement. Etymonline may contain more technical information regarding etymologies, which may not be appropriate for beginning or intermediate language learners. As Jackson (2002) put it, learners may need to familiarize themselves with such terms and concepts as Old French, late 14c., cognates (*étymologie*), immediate/ultimate origins, as well as abbreviations (e.g., cf. short for Latin confer). Miller (2018) supported this claim by stating that large amounts of information might be daunting for learners. Another downside to the OED is the absence of phonological information. That is, neither version includes etymological information on word pronunciations. However, it is well-established that the pronunciation of words has dramatically changed over time (Trask, 2013), including the great vowel shift in English (Frankis, 2020). Therefore, incorporating phonological changes into the OED might help foster phonological awareness/understanding among advanced language users.

The OED was found to offer limited interactivity as to language learning (e.g., interactive quizzes or exercises). However, Etymonline is designed primarily as a reference, not a language learning tool. This downside might accordingly be ignored, or recommendations for incorporating interactive etymology practice might be considered. The "test your English" section on the Tureng multilingual dictionary, for example, includes vocabulary, grammar, and listening activities and might be a promising self-assessment tool (Topal, 2022). Similarly, the Collins online learner dictionary also provides its users with interactive quizzes about grammar and vocabulary (e.g. word challenge) that might create a competitive learning environment (<https://www.collinsdictionary.com/quiz/elt/confusables>). Comparably, the Longman dictionary online offers language exercises on vocabulary, intermediate/advanced grammar, listening and pronunciation, and exam preparation (e.g., TOEFL and IETLS) (<https://www.ldoceonline.com/exercise/>). In a study, Boulton (2010) found the relative impact of dictionaries in language learning, although the participants predominantly leaned toward data-driven learning. It might thus be plausible to assert that dictionary activities supported with corpora might yield more fruitful learning outcomes.

The remaining drawbacks (i.e., potential inaccuracies, textual-visual distractions, and internet requirement) are not specific to the etymological tool at hand (i.e., the OED) but can be encountered in almost all online platforms. As with any online source, there is a risk of false or out-of-date information, albeit very rarely (Frawley, 1988). Therefore, it is essential to verify the information provided by the

OED with other trustworthy sources. In addition, due to the vast amount of content available, users might become distracted and spend more time than necessary on digital platforms (e.g., websites and apps) (Lang, 2020). Ultimately, reliance on stable internet connection is a frequently experienced disadvantage of digital/online platforms (Reddy Moonasamy & Naidoo, 2022), as in the OED. However, the OED can be used offline if upgraded to premium.

Conclusion

The review evaluated Harper's (2001) highly-rated, increasingly comprehensive OED (<https://www.etymonline.com/>) using Topal's (2022) adapted framework. Findings revealed potential educational gains, including the awareness and understanding of etymology, culture, history, and other languages, vocabulary improvement, and use as an academic resource. Possible pitfalls of the OED were cited as complex/technical language, lack of pronunciation etymologies, lack of interactive etymological exercises, linguistic/content-related inaccuracies, textual-visual distractions, and the internet requirement. The review also indicated the need for further updates and improvements to the OED, such as incorporating word pronunciation histories and the dark mode feature and overcoming the glitches. Nevertheless, the OED might be a promising language reference tool for language learners, teachers, academics, and etymology/linguistics enthusiasts. Quantitative and qualitative studies are, however, needed to corroborate the pros and cons cited in this review.

References

- Akbulut, F. D. (2017). Effects of morphological awareness on second language vocabulary knowledge. *Journal of Language and Linguistic Studies*, 13(1), 10–26.
- Ali Zarei, A., & Rahimi, N. (2014). Etymology, contextual pragmatic clues, and lexical knowledge in L2 idioms learning. *Iranian Journal of Applied Language Studies*, 6(2), 179–203. <https://doi.org/10.22111/ijals.2014.2193>
- Andrei, E. (2017). Technology in teaching English language learners: The case of three middle school teachers. *TESOL Journal*, 8(2), 409–431. <https://doi.org/10.1002/tesj.280>
- Aponte, G. (2013). *Etymology+ animation= Etymation: the history of spelling via animations* (Unpublished master's thesis). Bank Street College of Education, New York. <https://educate.bankstreet.edu/independent-studies/82>
- Aslan, E. (2016). A study on the use of mobile dictionaries in vocabulary teaching. *Journal of Language and Linguistic Studies*, 12(1), 1–8.
- Bagheri, M. S., & Fazel, I. (2010). Effects of etymological elaboration on the EFL learners' comprehension and retention of idioms. *Journal of Pan-Pacific Association of Applied Linguistics*, 14(1), 45–55.
- Baleghizadeh, S., & Bagheri, M. M. (2012). The effects of etymological elaboration on the EFL learners' comprehension and retention of idioms. *The Southeast Asian Journal of English Language Studies*, 18(1), 23–32.
- Ball, L. H. and Bothma, T. J. D. (2018). Establishing evaluation criteria for e-dictionaries. *Library Hi Tech*, 36(1), 152–166. <https://doi.org/10.1108/LHT-02-2017-0031>
- Barnhart R. K & Steinmetz, S. (1988). *The Barnhart dictionary of etymology*. W. Wilson Co.
- Beck, I. (1984). Developing reading comprehension: The impact of the directed reading lesson. In R. Anderson, J. Osborn, & R. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts*. Lawrence Erlbaum.
- Bellomo, T. (2005). *Latinate word parts and vocabulary: Contrasts among three groups comprising the community college preparatory reading class* (Doctoral dissertation, University of Central Florida). *Electronic Theses and Dissertations*. 281. <https://stars.library.ucf.edu/etd/281>

- Boers, F., Eyckmans, J., & Stengers, H. (2007). Presenting figurative idioms with a touch of etymology: More than mere mnemonics? *Language Teaching Research*, 11(1), 43–62. <https://doi.org/10.1177/1362168806072460>
- Boulton, A. (2010). Data-driven learning: Taking the computer out of the equation. *Language Learning*, 60(3), 534–572. <https://doi.org/10.1111/j.1467-9922.2010.00566.x>
- Byram, M. (1994). *Teaching-and-learning language-and-culture* (Vol. 100). Multilingual Matters.
- Carter, R., & McCarthy, M. (2014). *Vocabulary and language teaching*. Routledge.
- Chotkarnchanawat, R., Liangpanit, C., & Wasuntarasophit, S. (2017). Graduate students' reflections on the use of online dictionaries for writing a thesis. *Journal of Humanities and Social Sciences*, 13(2), 223–246.
- Çolak, F., & Balaman, U. (2022). The use of online dictionaries in video-mediated L2 interactions for the social accomplishment of virtual exchange tasks. *System*, 106, 102772. <https://doi.org/10.1016/j.system.2022.102772>
- Dictionary, O. E. (1989). *The Oxford English dictionary* (2nd ed.). Clarendon Press.
- Dziemianko, A. (2022). The usefulness of graphic illustrations in online dictionaries. *ReCALL*, 34(2), 218–234. <https://doi.org/10.1017/S0958344021000264>
- Ebbers, S. M. (2017). Morphological awareness strategies for the general and special education classroom. *Perspectives on Language and Literacy*, 42(2), 29–34.
- Ferrett, E., & Dollinger, S. (2021). Is digital always better? Comparing two English print dictionaries with their digital counterparts. *International Journal of Lexicography*, 34(1), 66–91. <https://doi.org/10.1093/ijl/ecaa016>
- Frankis, J. (2020). The Great vowel-shift and other vowel-shifts. In G. Nixon & J. Honey (Eds.), *An historic tongue: Studies in English linguistics in memory of Barbara Strang* (pp. 133–137). Routledge.
- Frawley, W. (1988). New forms of specialized dictionaries. *International Journal of Lexicography*, 1(3), 189–213. <https://doi.org/10.1093/ijl/1.3.189>
- Golzarnia, H., & Rahmani, R. (2018). The effect of teaching the etymology of words to learn and reinforce vocabulary by Iranian children. *Journal of Teaching English Language Studies*, 6(4), 164–186.
- Guillot, M. N., & Kenning, M. M. (1994). Electronic monolingual dictionaries as language learning aids: a case study. *Computers & Education*, 23(1–2), 63–74. [https://doi.org/10.1016/0360-1315\(94\)90033-7](https://doi.org/10.1016/0360-1315(94)90033-7)
- Harper, D. R. (2001). The online etymology dictionary [website]. <https://www.etymonline.com/>
- Hewett, K. (2019). *Teaching Spelling 6–11: Designing effective learning in English and across the curriculum* (Minibook 49). The United Kingdom Literacy Association.
- Holthausen, F. (1927). *Etymologisches wörterbuch der englischen sprache*. Tauchnitz.
- Huang, S., & Eslami, Z. (2013). The use of dictionary and contextual guessing strategies for vocabulary learning by advanced English-language learners. *English Language and Literature Studies*, 3(3), 1–7. <http://dx.doi.org/10.5539/ells.v3n3p1>
- Institute of Multi-Sensory Education (2015). Q&A with Douglas Harper: Creator of the online etymology dictionary. Available at <https://journal.imse.com/qa-with-douglas-harper-creator-of-the-online-etymology-dictionary/>
- Jackson, H. (2017). English lexicography in the Internet era. In P. A. Fuertes-Olivera (ed.), *The Routledge handbook of lexicography* (pp. 540–553). Routledge. <https://doi.org/10.4324/9781315104942-34>
- Jassem, Z. A. (2017). Harper's etymology dictionary online (etymonline). *A critical review. International Journal of English and Education*, 6(1), 335–356.
- Jian, H. L., Sandnes, F. E., Law, K. M., Huang, Y. P., & Huang, Y. M. (2009). The role of electronic pocket dictionaries as an English learning tool among Chinese students. *Journal of Computer Assisted Learning*, 25(6), 503–514. <https://doi.org/10.1111/j.1365-2729.2009.00325.x>
- Jin, L., & Deifell, E. (2013). Foreign language learners' use and perception of online dictionaries: A survey study. *Journal of Online Learning and Teaching*, 9(4), 515–533.

- Johnson, S. (1775). *A dictionary of the English language*. Consortium.
- Kipfer, B. A., & Chapman, R. L. (2007). *Dictionary of American slang* (4th ed.). HarperCollins.
- Klein, E. (1971). *A comprehensive etymological dictionary of the English language*. Elsevier.
- Lang, J. M. (2020). *Distracted: Why students can't focus and what you can do about it*. Basic Books.
- Levy, M. (2010). Developing the language skills: Aligning the technological tool to the pedagogical purpose. In C. Ward (Ed.), *The impact of technology on language learning and teaching: What, how, and why* (pp. 16–27). Regional Language Centre.
- Levy, M., & Steel, C. (2015). Language learner perspectives on the functionality and use of electronic language dictionaries. *ReCALL*, 27(2), 177–196. <https://doi.org/10.1017/S095834401400038X>
- Lillo, A. (2018). Etymological myths and compound etymologies in rhyming slang. *English Studies*, 99(6), 688–703. <https://doi.org/10.1080/0013838X.2018.1492233>
- Lund, R. (2007). *Questions of culture and context in English language textbooks: A study of textbooks for the teaching of English in Norway* (Unpublished doctoral dissertation). The University of Bergen, Norway. <https://hdl.handle.net/1956/2421>
- Maxson, R. E. (2010). *A kachina by any other name: Linguistically contextualizing Native American collections* (Master's thesis, University of Denver). Electronic Theses and Dissertations. 409. <https://digitalcommons.du.edu/etd/409>
- Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, 58(13), 2078–2091.
- Miller, J. (2017). Learners' dictionaries of English. In P. A. Fuertes-Olivera (Ed.), *The Routledge handbook of lexicography* (pp. 353–366). Routledge.
- Moeljadi, David, et al. (2019). Considerations for providing etymological information in the KBBI Indonesian dictionary. In M. Gürlek, A. N. Çiçekler, & Y. Taşdemir (Eds.), *Proceeding of the 13th international conference of the Asian association for lexicography (ASIALEX)* (pp. 223–240). Asos.
- Mohamad, M., Rashid, N., & Mohamad, W. N. W. (2017). The advantages and disadvantages of e-dictionaries to enhance vocabulary learning of ESL learners. The Asian conference on education and international development (ACEID) 2017. Kobe, Japan: Art Center, March 26–29, 2017, 1–11.
- Moreno, E. M. G. (2011). The role of etymology in the teaching of idioms related to colours in an L2. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, (16), 19–32. <http://dx.doi.org/10.30827/Digibug.32003>
- Nation, P., & Meara, P. (2013). Vocabulary. In N. Schmitt (ed.), *An introduction to applied linguistics* (pp. 44–62). Routledge.
- Nesi, H. (1999). The specification of dictionary reference skills in higher education. In R. R. K. Hartmann (ed.), *Dictionaries in language learning: Recommendations, national reports and thematic reports from the TNP sub-project 9: Dictionaries* (pp. 53–67). Freie Universität.
- Noroozi, I., & Salehi, H. (2013). The effect of the etymological elaboration and rote memorization on learning idioms by Iranian EFL learners. *Journal of Language Teaching and Research*, 4(4), 845–851. <https://doi.org/10.4304/jltr.4.4.845-851>
- O'Neill, E. M. (2019). Training students to use online translators and dictionaries: The impact on second language writing scores. *International Journal of Research Studies in Language Learning*, 8(2), 47–65. <http://dx.doi.org/10.5861/ijrsl.2019.4002>
- Pierson, H. D. (1989). Using etymology in the classroom. *ELT Journal*, 43(1), 57–63. <https://doi.org/10.1093/elt/43.1.57>
- Rahimi, M., & Miri, S. S. (2014). The impact of mobile dictionary use on language learning. *Procedia-Social and Behavioral Sciences*, 98, 1469–1474. <https://doi.org/10.1016/j.sbspro.2014.03.567>
- Reddy Moonasamy, A., & Naidoo, G. M. (2022). Digital Learning: Challenges experienced by South African university students' during the COVID-19 pandemic. *The Independent Journal of Teaching and Learning*, 17(2), 76–90. <https://hdl.handle.net/10520/ejc-jitl1-v17-n2-a6>

- Rehman, A., & Haider, K. (2013). The impact of motivation on learning of secondary school students in Karachi: An analytical study. *Educational Research International*, 2(2), 139–147.
- Reisi Gahroei, F., & Tabatabaei, O. (2013). Impact of L2 film instruction and English idiom etymology on Iranian EFL learners' idiom learning. *Research in English Language Pedagogy*, 1(1), 45–61.
- Rezaei, M., & Davoudi, M. (2016). The influence of electronic dictionaries on vocabulary knowledge extension. *Journal of Education and Learning*, 5(3), 139–148. <http://dx.doi.org/10.5539/jel.v5n3p139>
- Rodriguez-Keyes, E., Schneider, D. A., & Keenan, E. K. (2013). Being known in undergraduate social work education: The role of instructors in fostering student engagement and motivation. *Social Work Education*, 32(6), 785–799. <https://doi.org/10.1080/02615479.2013.765841>
- Sabonsolin, J. C. M. (2022). Por que es importante español: Narratives on the value of Spanish foreign language to the Cebuano learners, their native language, and culture. *International Journal of Middle Eastern Research*, 1(1), 10–16. <https://doi.org/10.32996/ijmer.2022.1.1.2>
- Simpson, J. (2009). The Oxford English dictionary: What does the future hold for historical lexicography? In S. Bruti, R. Cella, MF Albert (Eds.), *Perspectives on lexicography in Italy and Europe* (pp. 55–78). Cambridge Scholars Publishing.
- Soe, A. T., Win, T. T., & Yang, J. K.-Y. (2020). Promoting cultural awareness of university students in Myanmar. *วารสาร วิชาการ บัณฑิต ศึกษา มหาวิทยาลัย ราชภัฏ บุรีรัมย์* [Academic Journal of Graduate Studies, Buriram Rajabhat University], 8(2), 62–74.
- Solgi, F., & Sotoudehnama, E. (2017). Second language vocabulary learning: Etymology or synonymy? *Zabanpazhuhi (Journal of Language Research)*, 9(23), 105–120. <https://doi.org/10.22051/jlr.2015.1832>
- Stanciu, N. (2020). The role of etymology in second language acquisition. The case of Romanian in Kazakhstan. *International Journal of Innovation and Research in Educational Sciences*, 7(2), 134–147.
- Summers, D. (1988). The role of dictionaries in language learning. In R. Carter & M. McCarthy (Eds.), *Vocabulary and language teaching* (pp. 111–125). Routledge.
- Tarp, S. (2012). Online dictionaries: today and tomorrow. *Lexicographica*, 28(2012), 253–268. <https://doi.org/10.1515/lexi.2012-0013>
- Topal, I. H. (2022). A review of Tureng: The multilingual dictionary. *Journal of Research in Techno-based Language Education*, 2(3), 16–30. <https://doi.org/10.22034/jrtle.2022.346927.1029>
- Trask, L. (2013). *Language change*. Routledge.
- Trinh, T. L. A., Tran, T. K. N., Vo, T. B. N., & Huynh, T. T. S. (2021). The difference effects of paper dictionaries vs. online dictionaries. *AsiaCALL Online Journal*, 12(3), 28–38.
- Tulgar, A. T. (2017). Dictionary use of undergraduate students in foreign language departments in Turkey at Present. *Universal Journal of Educational Research*, 5(12B), 51–57. <http://dx.doi.org/10.13189/ujer.2017.051406>
- Vakhovska, O., & Isaienko, O. (2021). Language, culture, and image-driven interpretations in translation: A case for the university translation classroom in Ukraine. *Amazonia Investiga*, 10(47), 240–249. <https://doi.org/10.34069/AI/2021.47.11.25>
- Van der Merwe, M. F. (2020). Scaffolding for content knowledge of home language learning by collaborative online dictionaries. *Per Linguam: a Journal of Language Learning= Per Linguam: Tydskrif vir Taalaanleer*, 36(1), 1–14. <http://dx.doi.org/10.5785/36-1-893>
- Weekley, E. (1921). *An etymological dictionary of Modern English*. John Murray.
- Winkler, B. (2001). English learners' dictionaries on CD-ROM as reference and language learning tools. *ReCALL*, 13(2), 191–205. <https://doi.org/10.1017/S0958344001000520a>
- Zaidi, R. (2020). Dual-language books: Enhancing engagement and language awareness. *Journal of Literacy Research*, 52(3), 269–292. <https://doi.org/10.1177/1086296X20939559>